REMARKS

I.   Summary of the Office Action and this Reply

Claims 1-29 are pending in the application.

The Examiner has rejected claims 1-29 under 35 U.S.C. §102(e), asserting anticipation by U.S. Patent Publication No. 2002/0161801 A1 to Hind et al. ("Hind").

The Examiner has objected to the specification as containing an embedded hyperlink, and as containing objectionable phraseology. The specification is amended herein to overcome the objections.

The claims have been amended throughout, inter alia, to correct numbering, and corresponding claim dependencies, as noted by the Examiner. New claim 30 has been added.

II.   Formalities

It appears that no additional claim fees are due, since the official filing receipt reflects payment for 30 claims. However, a charge authorization is submitted herewith in the event claim fees are presently due.

It is noted that an item of information listed in the Other Documents section off the PTO-1449 form returned with the Action has not been initialed as considered. It is respectfully requested that a copy of the corresponding form be returned with an indication that the item has been considered.

It is also noted that a copy of the PTO-1449 form filed with the application was not been returned with the action. It is respectfully requested that a copy of the corresponding form be returned with an indication that the item listed therein has been considered.

It is further noted that acknowledgment postcards confirming receipt by the

PTO have been received for each item of information listed above.

III.   Response to 102 Rejections

The Examiner has rejected claims 1-29 under 35 U.S.C. §102(e) , asserting

anticipation by U.S. Patent Publication No. 2002/0161801 A1 to Hind et al. ("Hind").

A rejection under 35 U.S.C. § 102 is proper only if each and every element of

the claim is found in a single prior art reference. MPEP § 2131.

Claims 1-3 and 30

Independent claim 1 has been amended to recite a method for efficient

processing of a document encoded in a markup language that involves

communicating a data model representing the document <u>through a bus of a printed</u>

<u>circuit board from a special purpose processor configured for processing the</u>

<u>encoded document, to a general purpose processor configured for further</u>

<u>processing of the encoded document as processed by the special purpose</u>

<u>processor.</u> Accordingly, amended claim 1 clarifies the existence and interaction of

both a special-purpose processor and a general purpose processor. The offloading

of intensive processing from the general-purpose processor to the special-purpose

processor provides advantages in accordance with the present invention. See

specification, page 9, lines 18 - 20.

New claim 30 has been added to further distinguish the special purpose and

general purpose processors, reciting that each includes its own respective, distinct

microprocessor.

The Examiner is referred to the to the Description of the Related Art section of the specification in which it is discussed that intensive processing of encoded documents was formerly performed by a general purpose hardware processor that was also responsible for performing various other tasks. The general purpose hardware processor could be configured with specially configured software for performing the intensive processing of encoded documents. See specification, page 4, lines 17 - 19; page 5, lines 13 - 18. This is consistent with the disclosure of Hind. As described therein, this arrangement undesirably burdens the general purpose processor, which prevents and/or delays the general purpose processor from performing its other tasks.

Hind discloses that a conventional computer includes a bus (Figure 8) and that servers may communicate XML documents. However, Hind provides no disclosure whatsoever of such a special purpose processor and a general purpose processor. Further, Hind provides no disclosure of communication of a data model representing an encoded document <u>via a bus of a printed circuit board</u>, which is representative of a type of communication between such special purpose and general purpose processors.

The Examiner is reminded of the requirement of 37 CFR §1.104(c)(2) to identify the particular part of a reference that is relied upon, and is invited to identify with specificity any portion of Hind believed to disclose a special purpose processor configured for processing an encoded document that is separate from a general purpose processor for performing various processing tasks.

Claims 2, 3 and 30 depend from claim 1 and are likewise patentable.

For at least these reasons, claims 1-3 and 30 are patentable. Reconsideration and withdrawal of the rejections of claims 1-3 and 30 are therefore

the requested respectively.

Claims 4-14

Independent claim 4 is directed to a method for efficient processing of a document encoded in a markup language that includes processing the document using a special purpose processor. In this Reply, claim 4 has been amended for clarity to recite the implicit nature of the special purpose processor, namely, to recite that the special purpose processor is dedicated to processing of documents encoded in the markup language. Contrary to the examiner's assertion on page 3 of the action, paragraph of 44 of Hind provides no disclosure whatsoever of such a special-purpose processor. Hind discloses merely that there may be some processing of an XML/mXML document, which is consistent with the discussion above regarding the Description of the Related Art section of the specification in which it is discussed a general purpose hardware processor configured with specially configured software performs the intensive processing of encoded documents.

Claim 4 is further amended herein to recite passing the processed document to the target for further processing by a general purpose processor including a microprocessor that is separate from the special purpose processor. Such offloading of processing of such documents from a general purpose processor to a special purpose processor is neither taught nor suggested by Hind.

Claims 5-14 depend from claim 4 and are likewise patentable. Additionally, claim 9 recites that the special purpose processor includes a dedicated integrated circuit that is specially configured for parsing the encoded document. In contrast to

a general purpose processor, such a specially configured integrated circuit is neither taught nor suggested by Hind.

Further, claim 13 recites that the special purpose processor passes the processed document to a local application process target for further processing by a general purpose processor including a microprocessor that is separate from the special purpose processor. Therefore, claim 13 is specifically directed to a method involving local processing, on a single computer device, by both a special purpose processor and a general purpose processor. The portion(s) of Hind referenced on page 5 of the Action relate at most to either (1) separate general purpose processors on separate, remotely located devices (see Hind, Figure 3), or (2) separate processes performed by single (local) general purpose processor (see Hind, paragraph 40, lines 8-24). The claimed invention is neither taught nor suggested by Hind.

Claim 14 recites that the special purpose processor passes the processed document to a remotely located device for further processing by a general purpose processor including a microprocessor that is separate from the special purpose processor. The claimed invention is neither taught nor suggested by Hind.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 4-14 are requested respectfully.

Claims 15-24

Independent claim 15 is directed to a system for efficient processing of a document encoded in a markup language that includes both a general purpose processor and a dedicated special purpose processor. Claim 15 recites that the special purpose processor is specially configured to perform certain processing of

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documents encoded in the markup language, and then the general purpose processor is configured to perform distinctly different processing of such documents. Accordingly, this claim emphasizes the cooperative relationship of the special-purpose and general-purpose processors that allows for off-loading of certain processing tasks from the general-purpose processor to the special-purpose processor, which leads to advantages in accordance with the present invention.

Contrary to the Examiner's assertion on page 5 of the Action, Hind neither teaches nor suggests a special purpose processor of the type claimed, nor does Hind teach or suggest a system including special-purpose and general-purpose processors in the claimed relationship, as discussed in greater detail above with reference to claim 13.

The Examiner's citation of paragraph 44 of Hind relates to routing of a document between servers, routers for other network devices and describes a savings in conversion processing that occurs when it is unnecessary to convert from mXML to XML because the sending device has an mXML document and the receiving device is capable of receiving an mXML document. This neither teaches nor suggests the claimed system, which includes both: (1) a general purpose processor; and (2) a special purpose processor that is capable of performing processing that would otherwise be performed by the general purpose processor.

Claims 16-24 depend from claim 15 and are likewise patentable. Additionally, claim 18 is further patentable for reasons similar to those set forth above for claim 9.

For at least these reasons, reconsideration and withdrawal of the rejections of claims 15-24 are requested respectfully.

Claims 25-29

Independent claim 25 is directed to a <u>single printed circuit board</u> that includes <u>both</u> a <u>general purpose processor</u> for performing various tasks and <u>a special purpose processor operably connected to the general purpose processor and configured for processing documents encoded in a markup language</u>.

As discussed above, Hind provides no disclosure of such a special purpose processor, and in particular provides no disclosure whatsoever of such a printed circuit board including <u>both general-purpose and special purpose processors.</u>

Claims 26-29 depend from claim 25 and are likewise patentable. Additionally, claim 26 is further patentable for reasons similar to those set forth above for claim 9. Claim 28 is further patentable because it recites that the special purpose processor includes a supplemental general purpose processor, and thus that <u>the printed circuit board includes multiple general-purpose processors</u>. This is neither taught nor suggested by Hind.

For at least these reasons, reconsideration and withdrawal of the rejections of claims 25-29 are requested respectfully.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe claims 1-30 to be patentable and the application in condition for allowance. Applicants respectfully request issuance of a Notice of Allowance. If any issues remain, the

undersigned requests a telephone interview prior to the issuance of an action.

Respectfully submitted,

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